

THE CHANGE OF NATURE IN KAREN THOMPSON WALKER'S NOVEL '*THE AGE OF MIRACLES*'



A Thesis

**Submitted in Partial Fulfillment of the Requirements for the Degree
Of Sarjana Humaniora in English and Literature Department
of the Faculty of Adab and Humanities
of UIN Alauddin Makassar**

By

UNIVERSITAS ISLAM NEGERI

Irnowati

Reg. No. 40300110039

ALAUDDIN
M A K A S S A R

**ENGLISH AND LITERATURE DEPARTMENT
ADAB AND HUMANITIES FACULTY
ALAUDDIN STATE ISLAMIC UNIVERSITY
MAKASSAR**

2014

Persetujuan Pembimbing

Pembimbing penulisan skripsi saudara; **IRNAWATI, NIM: 40300110039**, Mahasiswi jurusan Bahasa dan Sastra Inggris pada Fakultas Adab dan Humaniora Universitas Islam Negeri Alauddin Makassar, setelah dengan seksama meneliti dan mengoreksi skripsi yang bersangkutan berjudul **“THE CHANGE OF NATURE IN KAREN THOMPSON WALKER’S NOVEL ‘THE AGE OF MIRACLES’** memandang bahwa skripsi tersebut memenuhi syarat-syarat ilmiah dan dapat disetujui untuk dapat diajukan pada sidang munaqasyah.

Demikian persetujuan ini diberikan untuk diproses lebih lanjut.

Samata, 15 December 2014

Pembimbing I

Pembimbing II

Dr. H. Barsihannor, M.Ag
NIP: 19691012 199603 1 003

Nasrum Marjuni, S.Pd., M.A
NIP: 19800909 201302 1 701

PERNYATAAN KEASLIAN SKRIPSI

Dengan penuh kesadaran, penulis yang bertanda tangan dibawah ini, menyatakan bahwa skripsi ini benar adalah hasil karya penulis sendiri, dan jika dikemudian hari terbukti merupakan duplikat, tiruan, plagiat, atau dibuat oleh orang lain secara keseluruhan ataupun sebagian, maka skripsi ini dan gelar yang diperoleh batal demi hukum.

Samata, 15 Desember 2014

Penulis,

Irnowati
40300110039

UNIVERSITAS ISLAM NEGERI
ALAUDDIN
M A K A S S A R

PENGESAHAN SKRIPSI

Skripsi yang berjudul, “The Change of Nature in Karen Thompson Walker’s novel ‘‘*The Age of Miracles*’’ yang disusun oleh Irnawati, NIM: 40300110039, Mahasiswi Jurusan Bahasa dan Sastra Inggris pada Fakultas Adab dan Humaniora Universitas Islam Negeri Alauddin Makassar telah diuji dan dipertahankan dalam *Munaaqasyah* yang diselenggarakan pada hari Senin, 15 Desember 2014 M, bertepatan dengan 22 Safar 1436 H, dinyatakan telah dapat diterima sebagai salah satu syarat untuk memperoleh gelar Sarjana dalam Ilmu Adab dan Humaniora, Jurusan Bahasa dan Sastra Inggris (dengan beberapa perbaikan).

Samata, 15 Desember 2014 M.
22 Safar 1436 H.

DEWAN PENGUJI:

Ketua	: Dr. H. Dahlan M., M.Ag.	(.....)
Sekretaris	: Muh. Azwar, S.Pd.I., M.Hum.	(.....)
Munagisy I	: Muhammad Taufik, S.S., M.Hum.	(.....)
Munaaqisy II	: Faidah Yusuf, S.S., M.Pd.	(.....)
Pembimbing I	: Dr. H. Barsihannor, M.Ag.	(.....)
Pembimbing II	: Nasrum Marjuni, S.Pd., M.A.	(.....)

Diketahui oleh:

Dekan Fakultas Adab dan Humaniora
UIN Alauddin Makassar

Prof. Dr. Mardan, M.Ag.
NIP: 19591112 198903 1 001

APPROVAL SHEET

Title : The Change of Nature in Karen Thompson Walker's novel '*The Age of Miracles*'
Name : Irnawati
Reg. Number : 40300110039
Majority : English and Literature Department

Samata, December 15st 2014

The Writer

Irnawati

Reg. No.: 403.001.10.039

Supervisor

Supervisor I

Supervisor II

Dr. H. Barsihannor, M.Ag
NIP: 19691012 199603 1 003

Nasrum Marjuni, S.Pd., M.A.
NIP: 19800909 201302 1 701

Approved by
The Head of English and Literature Department

Dr. Abd.Muin, M.Hum.
NIP: 19660102 199203 1 002

Acknowledged by
The Dean of Adab and Humanities Faculty of
UIN Alauddin Makassar

Prof. Dr. Mardan, M.Ag.
NIP: 19591112 198903 1 001

ACKNOWLEDGEMENT



First of all, the writer would like to extend the deepest gratitude to the almighty Allah swt, the creator, the only provider for providing to her with a little light for searching more of His unlimited knowledge during her study in State Islamic University of Alauddin Makassar. The writer also never forgot to send the greet and invocation to the Muhammad saw, the great prophet who was sent by God as the *Rahmatan Lil Alamiin* for the world.

The writer had gotten a lot of help and support from many people around her during the process in finishing this thesis. There are many people have provided their motivations, advices and even remark that helped the writer. Therefore the writer would like to express her appreciation to all of them.

1. The special gratitude is expressed to the writer's lovely parents, Muhammad Tahir and Salmawati who have given their advices, moral values, financial supports and prayers for the writer.
2. A lot of thanks to Prof. Dr. Qadir Gassing, HT. MS., as the Rector of UIN Alauddin Makassar, the Dean of Adab and Humanities Faculty, Prof. Dr. Mardan, M.Ag, the Head of English and Literature Department, Dr. Abd. Muin, M.Hum., and the Secretary of English and Literature Department, Serliah Nur, S.Pd., M.Hum., M.Ed., for their supports and suggestions.

3. The deep gratitude is expressed to the writer's supervisors, Dr. H. Barsihannor, M.Ag. and Nasrum Marjuni, S.Pd., M.A., for their guidances, knowledges, advices, corrections and generous support that have been given to the writer during finishing this thesis.
4. The lecturers of Adab and Humanities Faculty, especially to the lecturers of English Literature for their knowledge and enlightenment, also to the staffs of Adab and Humanities Faculty, for their help and administrative support.
5. Her appreciation is addressed to the writer's close friends, Jumriani, Yuliana, Indah Pertiwi, Gusliana, Muh. Fatahullah Taat who always gives her the precious time, support, attention, compliment and advice in finishing this study.
6. Unlimited thank is also addressed to the all of writer's friends in UIN Alauddin, BSI from AG.1 AG.2 AG.3 and AG.4 of 2010 who cannot be mentioned one by one.

The writer realizes that this thesis is far from being perfect, but the writer hopes that it will be useful for the readers.

Samata, December 15th 2014

Penulis,

Irnawati
40300110039

TABLE OF CONTENTS

	Halaman
COVER PAGE.....	i
HALAMAN PERSETUJUAN PEMBIMBING	ii
HALAMAN PERNYATAAN KEASLIAN SKRIPSI	iii
HALAMAN PENGESAHAN SKRIPSI.....	iv
APPROVAL SHEET	v
ACKNOWLEDGMENTS	vi
TABLE OF CONTENTS.....	viii
ABSTRACT	x
CHAPTER I INTRODUCTION.....	1
A. Background of Research	1
B. Problem Statements	4
C. Objectives of Research	4
D. Significance of Research	4
E. Scope of research	4
CHAPTER II REVIEW OF LITERATURE	5
A. Previous Findings	5
B. The Change of Nature	6
C. Kinds of nature	8
D. The effect of change of nature.....	10
E. Novel	13
1. Definition of Novel	13
2. Elements of Novel.....	14
F. Synopsis of Novel	18

G. Autobiography of Karen Thompson Walker.....	19
CHAPTER III METHODOLOGY OF RESEARCH	20
A. Method of the Research.....	20
B. Data Sources	21
C. Procedure of Data Collection	21
D. Instrument of Data Collection	22
E. Technique of Data Collection	23
CHAPTER IV FINDINGS AND DISCUSSION	24
A. Findings	24
B. Discussion	33
CHAPTER V CONCLUSION AND SUGGESTION	42
A. Conclusion	42
B. Suggestion	43
BIBLIOGRAPHY	44
CURRICULUM VITAE	46

ABSTRACT

This thesis is the research about The Change of Nature in Karen Thompson Walker's novel "The Age of Miracles" by using the change of nature by Redclift and Pelling. The objectives of this research are (1) To describe the change of nature in the novel *the age of miracles* (2) To describe the effects of change of nature in the novel *the age of miracles*.

The method used in this research is descriptive method by using theory Redclift and Pelling. The data collections of this research are in Karen Thompson walker's novel "*The Age of Miracles*" which is published in 2012, the novel consists of 294 pages and it is in serial form that has 34 chapters. In collecting the data, the writer used note taking as instrument.

In this research, the writer found five kinds of change of nature of factor and effects of change of nature such us; the average air temperature, air pressure, wind direction, humidity and natural disaster and appeared through the change of nature, they are effects includes earthquake, hot temperature are increasing, tsunami, the increasing frequency of tropical and permafrost melting.

The purpose of this research is to give understanding about kinds of change of nature and the effects of change of nature by using Redclift and Pelling theory to the readers or to the next researchers who would like to know further about it.

CHAPTER I

INTRODUCTION

A. Background

Literature has a close relationship with the social condition. Literature may construct the social attitude and life. Social condition influences the literature development. In literature there are many things that we can learn about, which are connecting with human life, such as: politics, culture, economy, social and nature. The literary work is an author's creativity which is used to portray his ideas and experiences about the social reality that can happen in the social life.

According to Eagleton (1983: 93) literature is not only an imaginative and personal work but it is also a reflection of cultural condition, a certain mind when the work was created.

Literature will almost never be separated from human life because it is always built together as a creation. Literature as a reflection of social reality in connection with the condition is further explained in the following statement:

“Literature is an expression of society if it assumes that literature, at any given time, mirrors the current social situation ‘correctly’ It is false. It is command place trite vague only that literature depicts some aspects of social reality, so say that literature is a mirror of expression of life is even more ambiguous. A writer inevitably expresses his experience and total conception of his life”(Wellek and Warren, 1970:110).

Based on the opinion above, the writer assumes that literature works in one period might represent the time they were written. Therefore, when we study

literature, we may study the condition of its society and it is the fact that literature work generally expresses something which exists in the man's life.

Novel is one of the literary works. Novel extends thought, feeling, and human experiences in long with details specified. Novel is a long invention prose to serve literary figures and to perform series event and surface (Panuti Sudjiman, 1984: 53). The same definition can be found in McDonal's book entitled "England in literature" (1982: 713) said that;

"Novel is a long work of narrative prose fiction dealing with characters, situation, and setting that imitated those of real life".

Novel is a creation, which can serve an entertainment and useful information about human social life and society. It is very humanistic process of observing living people, because it is creation from the background of human life experience in society. Novel is therefore a work of literature whose materials are taken from the contemporary life events. As literary work, it represents story about certain aspect of human life experience.

In the novel there are many aspects that we can analyze. One of them is Change of Nature. This is characterized by the process of global warming and climate irregularities. In general, climate change is defined as the condition of the average air temperature, air pressure, wind direction, humidity and other climatic parameters. Change of nature caused by global warming is increasing the average temperature of the earth's surface due to the accumulation of heat retained in the

atmosphere. Heat accumulation caused by the greenhouse effect and greenhouse gases, in earth's atmosphere (Redclift, 2010:11). Change of nature is characterized by Natural disaster is used here as shorthand for humanitarian disaster with anatural trigger. Whilst physical phenomena are necessary for the productionof natural hazard, their translation into risk and potential for disaster is contingent upon human exposure and a lack of capacity to cope with thenegative impacts that exposure might bring to individuals or human systems (Pelling, 2001:4).

The writer is interested in analyzing change of nature in the novel *The Age of Miracles* by Karen Thompson Walker. In the novel the age of miracles of catastrophe, luminous, suspenseful, unforgettable, the age of miracles tells the haunting andbeautiful story of julia and her family as they struggle to live in a time of extraordinary change.

On an ordinary saturday in a California suburb, Julia awakes to discover that something has happened to the rotation of the earth. The days and night are growing longer and longer, gravity is affected, the birds, the tides, human behavior, and cosmic rhythm are thrown into disarray. In a world that seems filled with danger and loss, julia also must face suprising developments in herself, and in her personal world divisions widening between her parents, strange behavior by her friends, the pain and vulnerability of first love, a growing sense of isolation, and a surprising, rebellious new strenght. It makes the writer interested in research change of nature in the novel.

B. Problem Statements

The problems of this study are formulated in the following research questions:

1. How are the kinds of change of nature in the novel *The Age of Miracles*?
2. What are the effects of change of nature in the novel *The Age of Miracles*?

C. Objectives of Research

The objectives of this study are to find out and reveal:

1. To describe the kinds of change of nature in the novel *The Age of Miracles*.
2. To describe the effects of change of nature in the novel *The Age of Miracles*.

D. Significance of Research

This research became reference for other students who want to study about literature because they may learn much about literary appreciation so they can make research on some topics based on the literary review.

The writer hoped that this writing gave some useful information for the writer herself, students, society and others to know more about literature, especially about the change of nature.

E. Scope of Research

The writer focused on describing kinds of change of nature and effects of change of nature in the novel *The Age of Miracles* by Karen Thompson walker, by using theory of Redclift and Pelling.

CHAPTER II

REVIEW OF LITERATURE

The writer presented some previous findings of research, which have the relation with this research.

A. Previous Findings

Abeng (2009) in her thesis *Bryant's Naturalism idea reflected in his poems (to a waterfowl and the gladness of nature)* and how far it is connected with his spirit of naturalism in creating a work of art. Her thesis focused on are related to naturalism or meaning that represents Bryant's spirit (in guiding and protecting everything in nature) as the representation of people of his age. The result from this analysis shows that the words which are related to naturalism in Bryant's poems are works that have the quality of nature.

Astari (2009) in his thesis *Naturalism in Jack London's to build a fire*. Her thesis focused on naturalism values, the themes, and the reflection of author's life in "to build a fire" a short story by jack London. The result of the analysis showed that the main character in story "to Build A Fire", the man is clearly not an experienced adventures who looked for the gold without concerning the environment and the themes are determinism and responsibility.

Jamaluddin (2012) in his thesis *The Reflection of Naturalism Values in the Father*. Her thesis focused on phenomenological approach to examine both intrinsic and extrinsic elements of the play and also to reveal word of experience

of human and sociological condition which is written in the father. The result of the research shows that naturalistic literature *in the father* reveals human role and existence struggling to be stronger for their position, their personal crisis and society, family and presenting a struggle between the strong and the weak, and often between the sexes.

In this research the writer used theory by Redclift and pelling, in order to answer the question in the statement of the problems. The writer applied the theory to analyze the Change of Nature in Karen Thompson Walker's Novel *the Age of Miracles*.

B. The Change of Nature

1. Definition of the change of nature

The Change of Nature is a natural resource such as water, forests, soil, rocks, plants, animals, rivers, climate, and temperature. From the variety of the entire surface it will not be fixed even always changing. Earth's surface has changed better known by changes in the physical environment. Changes in the physical environment are a change in the appearance of the earth caused by the activity of the earth, both natural and artificial. Changes in the physical environment include changes in land caused by rain, sunlight, climate changes, gravity, and ocean waves and natural disasters.

(Krisiyanto, 2011: 2).

There are several theories that explain the Change of Nature, according to Tjasyono (2004:9):

a. Geological theory

Earth is composed of the crust consists of plates which to date continues to shift. This shift led to widespread changes in land and sea. As a result of this extensive, many predict that there will be changes in the energy will later result in a change of nature. In addition, the occurrence of volcanic eruptions can trigger climate change. Issued by the volcanic ash eruption may indirectly cover the surface of the atmosphere that scatter incoming solar radiation.

b. Astronomy theory

This theory states that a change of this nature is a result of a change in the angle of the sun's orbit. Earth around the sun is not perpendicular. This causes the earth's orbit changes and the resulting changes in the rotational position of solar radiation received by the earth's surface. In addition to the change of the angle of rotation, the sun stains changes also affect the change. Solar energy received by the Earth as heat also affects the climate of the earth. If circumstances change, which means to be a lot or a little, then the energy that we get from the sun will also be affected.

c. Carbon dioxide theory (CO_2)

This theory states that in general, natural changes due to increased CO_2 content in the atmosphere, which is one example of greenhouse gases. CO_2 absorbs radiation (radiation from the earth) at a wave length of 4-5 microns. Therefore, an increase in the concentration of atmospheric carbon dioxide will increase the temperature of the earth's surface and reduces the amount of radiation the Earth.

2. Kinds of The Change of Nature

According to Redclift (2010:11) Change of nature is characterized by the process of global warming and climate irregularities. In general, climate change is defined as the condition of the average air temperature, air pressure, wind direction, humidity. The change caused by global warming is increasing the average temperature of the earth's surface due to the accumulation of heat retained in the atmosphere. Heat accumulation caused by the greenhouse effect and greenhouse gases, in earth's atmosphere.

- a. **The average air temperature** is the degree of hotness or coldness of a body or environment. A measure of the average kinetic energy of the particles in a sample of matter, expressed in terms of units or degrees designated on a standard scale.
- b. **Air pressure** is the force of physics to declare force, the greater the compression force, the greater the pressure.

- c. **Wind direction** is the direction, measured on the points of a compass, from which wind is coming. For example, a wind that is blowing in a northeasterly direction and coming from the southeast is called a southeast wind. The direction of the wind is extremely important in many ways (Murwanto, 2013:5).
- d. **Humidity** is the amount of water vapor in the air. Water vapor is the gaseous state of water and is invisible. Humidity indicates the likelihood of precipitation, dew or fog. Higher humidity reduces the effectiveness of sweating in cooling the body by reducing the rate of evaporation of moisture from the skin (Gibbs, 2010:30).

According to Pelling (2001:4), add natural disaster as change of nature. **Natural disaster** is used here as shorthand for humanitarian disaster with a natural trigger. Whilst physical phenomena are necessary for the production of natural hazard, their translation into risk and potential for disaster is contingent upon human exposure and a lack of capacity to cope with the negative impacts that exposure might bring to individuals or human systems.

From some definitions above, the writer concludes that Change of nature in the earth caused by the activity of both natural and artificial. Changes in the physical environment include changes in land caused by rain, sunlight, ocean waves, gravity, global warming and natural disasters. The author expects us to

better understand the nature symptoms that occur in everyday life, more than that we are also expected to raise awareness early on to love nature, and may also be able to participate to maintain and care for nature.

C. The Effect of the Change of nature

According to Sudibyakto (2013:9) the effects change of nature will bring great impact for us include sea level rise like tsunami, which is big wave coming to the main land due to the increasing volume of water due to ice sheets at the poles are melting, extreme weather, hot temperatures are increasing, acid rain, which is rain water that contains sulfur that is acidic to some existing object surface of the earth and the extinction of various animal species. Fadliah (1999:2) explained change of nature or rather climate change variables are changes in temperature, air pressure, wind, rainfall, and humidity as a result of global warming. Global Warming is the increase of temperature average atmosphere, ocean and land earth. At this time the earth is warming rapidly. According to meteorologists, over the last century, the average temperature has increased from 15°C to 15.6°C . As a result of the heat of the earth resulting in high evaporation and precipitation drops uncertain until the end of 2007 in the quantitative value of changes in the earth's average temperature is small but their impact on the environment is extraordinary. The impact of global warming has caused the sea level rise, climate change, damage to organisms and ecosystems, and the effects on water availability and agriculture. The rise in the average

temperature of the earth is one of the evidence of a change of nature. Environmental damage and the chain will never give up as long as there has been no action to anticipate them. Rising sea levels will have a direct impact on the shoreline, submerging several low-lying areas and islands, flooding on small islands or the average area of the city to the coast, the destruction of mangrove forests. Sinking will cause many problems for the global environment.

The effects change of nature, such as; earthquakes, hot temperatures are increasing, tsunami, the increasing frequency of tropical diseases, permafrost melting. (Redclift, 2010:11).

- a. **Earthquakes** (also known as a quake, tremor or temblor) is the result of a sudden release of energy in the earth's crust that creates seismic waves.
- b. **Hot temperatures are increasing** is a comparative objective measure of hot and cold. It is measured, typically by a thermometer.
- c. **Tsunami** is a series of huge waves that can cause great devastation and loss of life when they strike a coast.
- d. **The increasing frequency of tropical diseases** is diseases that are prevalent in or unique to tropical. The diseases are less prevalent in temperate climates, due in part to the occurrence of a cold season. These insects may carry a parasite, bacterium or virus that infectious to humans and animals.

- e. **Permafrost melting** is permanently frozen soil, and occurs mostly in high latitudes. As result of climate change, permafrost is at risk of melting, releasing the stored carbon in the form of carbon dioxide and methane, which are powerful heat-trapping gases.

In addition, Prasodjo (2010:6) stated that the effects change of nature such us; spread of tropical diseases, malaria, dengue fever, and yellow fever. Not to mention the increasing number of people who develop diseases such as skin cancer, cholera and so the latter is increasingly prevalent, and include a wider area. Another disadvantage is that soon there will be the reduction in biodiversity and extinction of some species due to the change of seasons, life cycles, migration time, reduced area as well as food shortages. Faith (2009:7) one of the effects of change of nature is Global Warming, a natural change that cause increased drought disasters such as floods, pest rapid growth and extreme weather events. This is all due to changes in weather and sea and also as a result of human activity itself, which is not concerned with the environment.

From the explanation above, the writer can conclude that the effects change of nature is that the most fundamental instability in the earth's weather and rising temperatures on earth's surface, due to the thinning of the ozone layers o that it can be no longer filter out sunlight coming into the earth's surface. This can be mitigated if we keep our environment as possible. Just a small example in order to reduce illegal logging remains many catchment areas and maintains the cleanliness of our environment together.

D. Novel

1. Definition of Novel

Denziger in Hermanto (2007: 11) defines novel as follows:

“Novel is a piece of literature which attempts to describe the universe in which we live and try to give a specific impression of universe. It has a special value, for we can learn so much from it. It often presents something that we can see in every daily life is as well.”

The definition of novel above demonstrates that novel is type of literary work that has special value so that persons can learn about every daily life from it. Moreover Qalbiyullah (2009:7) defined novel as a long work of narrative prose fiction that deals with character's situation and setting comes from imagination of author.

According to Abrams in Tahir (2013:2), novel as a fiction introduces an imagination world that consists of intrinsic elements like setting, plot, characterization, point of view, etc. they are existential elements because they depends on the author creation.

In line with Koesnosoebroto (1988:20) explained that novel is any long work of prose fiction which makes some claims be considered as a work of art. Koesnosoebroto also reminded that the novel is like any genre, it is not a pigeonhole but an ingredient and an element that enters into the art of the novels and their relatives.

From the explanation above, the writer can conclude that novel is the fiction from the human activity that is reflected in to the story as an imagination

of author. Novel often describes about part of human life with the passage of life from character.

2. Elements of Novel

The elements of novel are theme, plot, setting, character, point of view, conflict and style. They have purpose to develop the story so that it feels complete. Those elements give a strong effect and impression to the writing. Koesnosoebroto (1988: 28) explained that in a work of literature, each element are used or chosen by the writer only in relation with other elements. These elements must work together to make a good story. The writer inferred that the reader needs to understand some elements used by author to achieve understanding to the novel.

a. Plot

Plot is in fact a technical term to say about a series of tied together events in a story. Koesnosoebroto (1988:28) defines plot as the sequence of incidents or events of which a story is composed while Connolly in Koesnosoebroto calls plot as the arrangements of the details and incidents in a story. The plot is plan design of the story to prepare the reader for future event in the story. In a good plot the conclusion is a logical believable result of receding events.

From two definitions above, the writer concluded that plot is the structure of story or series of events showing characters in conflict from beginning of the first until the end of the story.

b. Character

Abrams in Koesnosoebroto (1988:66) said that character is the persons in a dramatic or narrative work, endowed with moral and dispositional qualities that are expressed in what they say in dialogue, and what they do in action. According Kennedy in Koesnosoebroto (1988:65) tries to define character as an imagined person who inhabits a story. As Kennedy has pointed out above, the story may occur not only to human being but also to substance of nature like stone, water, animal, grass or wind. Further Rahmawati (2011:15) said that character is the persons in narrative work through imagination of author that confronted the events of the story and expressed in what they say in dialogue, and what they do in action.

From statements above the writer considered that character is figure of story. A story is created by through existences of character. Character can be described by how character speaks, appears and acts in the story. Character is used to know how mentality or emotion of the person or how the person is distinguished from others.

c. Setting

Connolly in Koesnosoebroto, (1988:79) Setting is in a sense “the time, place, and concrete situation of the narrative, the web of environment in which characters spin out their destinies”. In a good story, setting is so well integrated with plot and character that the reader is hardly aware of it.

In other words, Abrams (1971:157) setting as the general locale and the historical time in which the action occurs in a narrative or dramatic work, while the setting of an episode or scene within a work is the particular physical location in which it takes place. Rahmawati (2011:17) stated that setting is the place and all environments in the story that contains of setting of place, time and social setting that relates to behavior of society in the story such as customs, beliefs or ideologies.

The writer completed the definition of setting in the novel is the part of time that is include in the story such as setting of time, place and condition of the story. Readers have to know the physical description of the setting, where the story happens, how it looks, feels, or smells.

d. Theme

Perrine, (1959:137) the theme of a piece of fiction is its controlling idea or its central insight. Theme is meaning of the story releases, it may be the meaning of the story discover by theme.

The opinion about theme also explained Hamalian and Karl (1967:323) theme is a kind of composite statement which requires our comprehension of numerous other elements. In addition theme is the main topic that contained whole of the story. According to Rahmawati (2011:17) theme is the ideas of the story that contain the message of the authors to convey their purposes and minds in the story. The opinion about theme also explained by Nurhaedah (2010:13), she said that theme is the general topic embedded in a story or a generalization about life or human character that a story explicitly or implicitly embodies.

In addition, theme is the main topic that contains whole of the story. Theme is what a story talks about. A story may be about love, death or happiness. Every story in the literature has a theme to make the story consistent. Through theme the reader can understand the purpose of the story.

e. Point of View

Connolly in Koesnosoebroto (1988:85) stated that point of view is the way an author chooses to tell his story, it can be a first person observer and a third person a limited range and unlimited range (the omniscient point of view).

Meanwhile Wilkerson in Koesnosoebroto (1988:88) recognized three kinds of point of view, they are first person, omniscient, and objective. The authors use point of view to tell his story controls how and what the reader sees, it determines the reader's angle of vision. Point of view should be consistent with a story's purpose or meaning, the author wants the reader to

react his story. Furthermore, Qalbiyullah (2009:10) explained that point of view is one important tool in telling a story since it determines how much the reader should know of what is happening in the story.

E. Synopsis of the Novel

Julia is an eleven-year-old who lives in California. Weeks before her birthday, the world undergoes an unexplained phenomenon called 'slowing', in which the time taken to complete one rotation of the Earth increases. By the time it is confirmed by experts, a day is 24 hours and 56 minutes. The hours steadily increase and dramatically alter life on Earth. Reactions differ: while some try to adapt with it, others, like Julia's grandfather, believe slowing to be a government hoax and still others, like Julia's best friend Hanna's family believe it to be God's wrath and return to their hometowns.

After weeks of chaos, the American government announces the adoption of 'clock time', in which the world functions as normal according to the 24-hour clock, regardless of whether it is day or night outside. Some people reject clock time altogether, like Julia's neighbor Sylvia, and set their lives according to the sun, ignoring clock time. Such people, called 'real timers', face discrimination from "normal" people. Meanwhile, the longer days have psychological effects on people: Julia's mother starts suffering from a slowing-related disorder (referred to as 'the syndrome', its effects vary from person to person), crime rates hike and people purportedly become more impulsive (the excuse Julia uses to convince

herself when she finds her father is having an affair with Sylvia). In addition to this, Julia's grandfather goes missing on her twelfth birthday.

(Walker, 2012:1-294).

E. Autobiography of Karen Thompson Walker

Karen Thompson Walker was born and raised in San Diego, California, where *The Age of Miracles* is set. She studied English and creative writing at UCLA, where she wrote for the UCLA Daily Bruin. After college, she worked as a newspaper reporter in the San Diego area before moving to New York City to attend the Columbia University MFA program. A former book editor at Simon & Schuster, she wrote *The Age of Miracles* in the mornings before work sometimes while riding the subway. She is the recipient of the 2011 Sirenland Fellowship as well as a Bomb Magazine fiction prize. She lives in Brooklyn with her husband. (Walker, 2012:295).

CHAPTER III

METHODOLOGY OF RESEARCH

This chapter focused on method, instrument of the research, procedure of data collection, and technique of data analysis. The research is conducted scientifically, systematically and logically.

A. Method of the research

Ratna (2008:34) considers method as the strategy to understand the reality, the systematic steps to analyze the problem. According to Palayukan (2010:21) methodology is set of general conceptions the writer research where the research itself by applying structural method. Suriasumantri (2003:328) defined that methodology is the science of methods that is used of the writer to make the research.

The method is the strategies in understanding the reality and systematically procedure to solve the problem.

The writer used a descriptive method to analyze data. Descriptive method is the method that intends to describe everything that related to the topic of the research. The writer collects data by reading the related books, articles, notes, and other literatures that are same.

B. Data Sources

The data of research are divided into two categories namely primary data and secondary data.

a. Primary data

The primary data is the main data that analyzed as an object of the research. According to Siswantoro in Saputra (2012:22) primary data is the main data, which is selected or obtained directly from the source without intermediary.

The primary data of this research will be taken from the novel *The Age of Miracles by Karen Thompson walker*. The novel consists of 294 pages and it is in serial form that has 34 chapters. The writer reads the story of the novel then takes words, sentences or paragraphs from the novel to be analyzed.

b. Secondary data

According to Inayah (2012:19) the secondary data used by writer is the writer reads some references such as; books, internet and thesis which related to this research. Secondary data will help researcher in analyzing the primary data.

C. Procedure of Data Collection

According to Pradopo in Tahir (2013:24) the procedures of data collection are comprehensive reading and noting. In addition the writer collected the supporting data qualitatively which means the data which are collected are not related to calculation or numbers. Comprehensive reading is used to know entire work for marking some smaller unit to analyze. The unit to analyze in this case is

intrinsic aspect of the work and noted to specify the limit of intention. Then, transcribing the important units and the data in this research which were ready to be analyzed.

From explanations of Pradopo, the writer made the procedure of data collection for this research, namely:

1. The writer read the novel comprehensively.
2. The writer read some books which can provide information for the sake of the data presentation.
3. The writer note and collected the supporting data in the novel qualitatively.

D. Instrument of Data Collection

In this research, the writer got the data directly from the novel and other additional references from books, internet and other supporting references. The instrument that used by the writer is note taking. Note taking is the practice of writing down pieces of information in a systematic way. As Endraswara (2011:163) defined that note taking is the process of data selection. In note taking process, the data which is not relevant to the topic is left while the relevant data is given a stress such as underline or boldface, so that it can help the writer to analyze the data. Moreover Nasir in Rosmini (2012:30) stated that note taking is the way of recording the data through using the cards. That notes focuses on page, lines, and information related to the theory. So the writer uses note taking methods in the collecting data process.

E. Technique of Data Analysis

In analyzing data in this research, the writer analyzed the story in the novel accurately then chose some data that found in the novel. The writer used Redclift and Pelling theory. It referred to kind of change of nature and effect of change of nature.



CHAPTER IV

FINDING AND DISCUSSION

In this chapter, the writer presented the data which are considered as plot and setting in the Redclift and Pelling theory in the novel “The Age of Miracles” by Karen Thompson Walker.

A. FINDINGS

In this research, the writer presented the data analysis based on Redclift and pelling theory in the novel “The Age of Miracles” by Karen Thompson Walker. However, the writer just focused the kinds of change of nature in the novelsuch as; the average air temperature, air pressure, wind direction, humidity, and natural disaster. Tounderstand the data the writer presented explanation , **C** is **Chapter**, **P** is **Page**, and **D** is **data**. They are as follows:

1. The change of nature in the novel “the age of miracles”

The novel "The Age of Miracles," by Karen Thompson Walker tells the story of an adolescent girl struggling with coming of age at the same time that the world around her seems to be coming apart. Julia's world changes dramatically when scientists announce that the rotation of the Earth has begun slowly. This slowing results in solar storms, power outages, and daylight days that stretch beyond the normal period of 24 hours. Themes in the story include the effect uncertainty has on those around Julia and the way they cope with their personal fears as well as the special challenges these changes have on

those who are still trying to determine what life is all about. In this part, the writer presented kinds of changes of nature and effect change of nature. To understand the data the writer presented explanationsuch as;

The kinds of nature:

1. The average air temperature (A.T)
2. Air pressure (A.P),
3. wind direction (W.D)
4. Humidity (H)
5. Natural disaster (N.D)

The effects of nature

1. Earthquake (E)
2. Hot temperature are increasing (H.T)
3. Tsunami (T)
4. The increasing frequency of tropical (F.T)
5. Permafrost melting (P.M)



UNIVERSITAS ISLAM NEGERI
ALAUDDIN
M A K A S S A R



UNIVERSITAS ISLAM NEGERI
ALAUDDIN
M A K A S S A R



UNIVERSITAS ISLAM NEGERI
ALAUDDIN
M A K A S S A R



UNIVERSITAS ISLAM NEGERI
ALAUDDIN
M A K A S S A R



UNIVERSITAS ISLAM NEGERI
ALAUDDIN
M A K A S S A R



UNIVERSITAS ISLAM NEGERI
ALAUDDIN
M A K A S S A R



UNIVERSITAS ISLAM NEGERI
ALAUDDIN
M A K A S S A R

B. Discussions

In this part, the writer identified the data which were taken from the novel “The Age of Miracles by Karen Thompson Walker”. The writer discussed based on the Redclift and Pelling theory who has divided the change of nature into the kinds and the effects of change of nature.

1. The writer has found average air temperatures as kinds of change of nature and hot temperature as the effects of change of nature which are the **datum 1**, Helen, Julia's mother told her that how terrible our days, many things have happened without us knowing. Julia's mother forbids her to not hang around outside because of pollution and environmental pollution which may pose a variety of diseases. It could be seen effects of change of nature “**hot days, traffic jams, leaking pipes, even cigarette smoke**”, in this datum explain the occurrence of several events that indicate that the existence of climate change and effects such as hot days. In **Datum 2**, Julia says that October is very different this time in October usually, she thought it was weird. Same month of the season with a season October month of July, it was very hot, which should in October is winter. It could be seen effects of change of nature “**it was October, but it felt like July; the air was summer air**”. In this datum climate change which showed symptoms of natural changes such as the change of seasons that cannot be predicted. In **Datum 19** showed that usually the summer it is not the same, in this month it is the extremely summer. Hot

day, a very long day, Julia feels how hot the sun as if the sun lit up and we were able to bake. We cannot pass the road barefoot. Our skin was burning, red and sore. As if the sun was right above our heads. I see earthworms sizzling ground and flowers withered because extreme heat. It could be seen effects of change of nature'' **The sun blazed longer each time it came around, baking our street until it was too hot to cross barefoot.** In this datum natural symptoms indicate that the presence of a very hot day can burn our skin.

2. In the air pressure, the writer has found of the air pressure which are the **datum 3** showed that changes in Earth's gravity led to a slowdown in all things as we need to do something great energy, we need to do a great pressure, for example, the slightly increased drag of a hand on a knife or a finger on a trigger. It could be seen effects of change of nature '' **every action required a little more force than it used to**'' in this datum showed symptoms of pressure or force changes that are due to a slow down or gravity. In **datum 4** showed that Julia felt that gravity has changed everything, week next week it changes the more he felt, as the days are long, very hot day, It could be seen effects of change of nature **''I would find it harder and harder to kick a soccer ball across a field** '' in this datum occurs several symptoms that indicate that a change in gravity and the pressure on an object. **In datum 5 and 6** showed that here explained that the people, who travel by train, feel strange. They feel that

the train drove by slowly. It could be seen effects of change of nature “
train who experiences time moreslowly and not the other way around
 “ everyone felt that the slow down affects everything. Affects every what
 we do “**even able to affect the flight and navigation** “

3. The writer has found air pressure as kinds of change of nature and the increasing frequency of tropical as the effects of change of nature which are **datum 7 and 8** showed that Earth's gravity does not just change everything but also have a negative effect for everyone. We can feel the impact is not directly but slowly. It could be seen effects of change of nature “ **dizziness, nausea, insomnia, fatigue, and sometimes, as was the case with my mother, fainting** “ in this datum explained how very unpredictable the effects of gravity changes.
4. The writer has found wind direction as kinds of change of nature which are **datum 9 and 10** showed that when minutes later, the sun finally did slip behind the hill, proof at last the earth, however slowly, continued to turn and when the night has come wind direction turned the usually at night the wind was blowing from the sea to the land, but this quote describes the change in wind direction from the desert to the land. It could be seen effects of change of nature “**the wind reversed in the night and turned hard, blowing in from the desert instead of up from the sea and storm less wind**” in this datum changes in wind direction which showed that a change in wind direction uncertain.

5. The writer has found humidity as kinds of change of nature **datum 11** showed that in November, increasingly uncertain season. Very hot during the day but when evening had come, all turned cold. The high humidity results in damage to plants such as. It could be seen effects of change of nature “**grapes froze on the vine, orange groves withered in the dark, the flesh of avocados turned black from the frosts.** In this datum changes showed that climate change is uncertain as the air is very hot afternoon and at night the air is very cold.
6. The writer has found natural disaster as kinds of change of nature and earthquakes as the effects of change of nature which are **datum 12** showed that here we are told that we will see the earth quake and tsunami, we would view the mass death of flora and fauna, and we will see a lot of unexpected events. Everyone has been anticipation all of possibilities that will happen after the earth quake and tsunami. It could be seen effects of change of nature “**the oceans may begin to shift toward the poles**”. In this datum occurs several natural phenomena show that the existence of the earthquake and tsunami as the oceans may begin to shift toward the poles. In **Datum 13, 14, 15** showed that the ground moves, the motions of the earth, so that people are afraid to leave the house let alone do the activity. Many children are afraid to go to school, there are also students who bring lunch to school or food supplies for fear of an earthquake happen and they cannot go home. We were Californians and we were

Californians and already know that earthquakes occur frequently, so that we have set up various supplies such as food and batteries in anticipation of earthquakes. It could be seen effects of change of nature **“the motions of the earth”** and **“ground could shift and shudder”** and that **fissures might appear in our sidewalks”**. In this datum occurred several natural phenomena show that the existence of such an earthquake; ground moving. **Datum 16** showed that the cracked streets, swimming pools sometimes mixed a stir like a bowl that will spill, people are afraid to do the activity, children are afraid to go to school. It could be seen effects of change of nature **“Swimming pools sometimes sloshed like bowls of water”**. In this datum occurred several natural phenomena show that the existence of such an earthquake and tsunami; the cracked streets. In **datum 17** and **18** show that California residents already know that earthquakes occur frequently, so that they have set up various supplies such as food and batteries in anticipation of earthquakes. It could be seen effects of change of nature **“we knew to beware of flying glass”** and **Californians were no more prepared for this particular calamity”**. We stay in California; we have become accustomed to the earthquake, the earthquake in our opinion it's not too worrying. We are accustomed to crawl under the table, preparing food supply warehouse at anytime of the earthquake came. Each of our school, we equipped food preparation at least we did when the earthquake struck.

7. The writer has found natural disaster as kinds of change of nature and tsunami as the effects of change of nature which are **datum 20** showed that changes in the Earth's rotation cause changes in weather and seasons and also causes natural disasters such as earthquakes and tsunamis. Tsunami is a terrible natural disaster. Tsunami capable destroys everything. Destroy our living space, mass death of flora and fauna. So, that it can be said that a tsunami like the end of the day. It could be seen effects of change of nature'' **We're going to see earthquakes and tsunami''** in this datum the occurrence of several events that indicate that the existences of change of nature like tsunami. In **datum 21** showed that large birds had begun to circle the sky. These were not suburban birds. These were hawks and eagles and crows, birds whose hefty wings spoke of the wilder landscapes that persisted east of here. They swooped from tree to tree, their calls drowning out the twitter of our usual backyard birds. I knew that animals often sensed danger where humans did not, and that in the minutes or hours before come disaster. It could be seen effects of change of nature **''tsunami or a wildfire strikes''** I had heard that elephants sometimes snapped their chains and headed for higher ground. Snakes could slither for miles. In this datum, Julia thinks the birds know. She could feel the muscles in my neck tensing as I watched them.

8. The writer has found air pressure as kinds of change of nature and the increasing frequency of tropical as the effects of change of nature which are **datum 22, 23, and 24** showed that we called it gravity sickness at first, the slowing syndrome later, and there would come a time eventually when you need only mention the syndrome and everyone understood what you meant. The symptoms were wide-ranging but related, It could be seen effects of change of nature''**dizziness, faintness, fatigue, insomnia, collapse, malaria, dengue and fainting**'''. In this datum a man might stumble in the street. A woman might collapse in a mall in some small children, the effects included the excessive bleeding of gums. Some victims were too weak to leave their beds for days.
9. The writer has found natural disaster as kinds of change of nature and permafrost melting as the effects of change of nature which are **datum 25** showed that Julia must adapt to all that is happening. Day and night getting longer, gravity change, environment was a mess, She must try to accept any changes in the surrounding nature. It could be seen in quote ''**the rate at which ice melted**'''. In this datum, Ice melting, boiling water and multiplication and cell death of the human body, it is all the effect of a change of nature, no one knows when the next disaster will occur. In **datum 26** showed that warning of impending disaster had been there for decades, since the first droplets of acid rain fell, since the noble depletion of the ozone layer, since the oil crisis of the 1970s, it was always in the

voice warning. Warning it is expected that the person is able to prepare for disasters. It could be seen in quote **''the glaciers were melting and the rain forests were burning''**. In this datum that disasters such as the melting of glaciers and burning forest, this showed symptoms of a natural disaster. The arrival of unexpected, no one knows the disaster will come.

Datum 27 showed that it has been reported that the glacier smelt faster, the volcano became active again because of climate change and air temperatures are very hot, the pope who failed to immigrate and there are many things that can make people more afraid. It could be seen in quote **'' Glaciers were melting even faster than before. Certain long dormant volcanoes had begun to bubble and steam.** In this datum occurred several instances of natural phenomena that show natural changes such as glaciers were melting even faster and dormant volcanoes.

From the statement above, the writer can conclude that change of nature of a few factor, such us the average air temperature, air pressure, wind direction, humidity, and natural disaster and the effects of change of nature such us; earthquake, hot temperature are increasing, tsunami, the increasing frequency of tropical and permafrost melting.

After analyzing the data, the writer considered that 27 datum is the kinds of the change of nature and effects in the novel “The Age of Miracles” by Karen Thompson Walker.



CHAPTER V

CONCLUSION AND SUGGESTION

This chapter provides conclusions and suggestions. After finding and analyzing the analysis change of nature and effects of change of nature in the novel “The Age of Miracles” the writer puts some conclusions and suggestions to the readers.

A. Conclusions

After analyzing the data by findings and discussing. Then, the writer would made conclusion after having elaborated the data. The conclusion is the answer of the problem statement. The writer gets two conclusions, as follows:

1. There are five kinds of nature in the novel and effect of change of nature.

The writer has found the change of nature based on analyzing by using Redclift and Pelling theory, such us the average air temperature, air pressure, wind direction, humidity and natural disaster.

2. effects of change of nature by using Redclift and Pelling theory, such us; earthquake, hot temperature are increasing, tsunami, the increasing frequency of tropical and permafrost melting.

B. Suggestions

In the end of this thesis, the writer also provided a number of suggestions as follow:

- a. For the next researchers, the writer recommended that they can analyze novels with the same topic about change of nature and learn more about nature in order to do more specific research about change of nature.
- b. For the readers, the writer suggested that they can take the messages that are indicated in the novels and know more about change of nature. Because it can be beneficial information to understand about change of nature and to know effect change of nature.
- c. Especially for students of English and Literature department, the writer hoped that they can learn about change of nature very well because it includes the subject of English and Literature department. Furthermore, it can help them to understand nature.

BIBLIOGRAPHY

- Abeng, Tenri A. 2009. *The Naturalism on Cullen Bryant's*. The Faculty of Cultural Sciences Hasanuddin University.
- Alphonse, Marlene. 2011. *Naturalism in Literature*. Retrieved from <http://www.buzzle.com/articles/naturalism-in-literature.html>. (Accessed on July 19th, 2014).
- Andreasen, Robin O. 2005. *The Meaning of 'Race': Folk Conceptions and the New Biology of Race*. *Journal of Philosophy*.
- Astari, Gunawan M. 2009. *Naturalism in Jack London's*. The Faculty of Cultural Sciences Hasanuddin University.
- Campbell, Donna M. 1997. *Naturalism in American Literature*. Athens: Ohio university press.
- Eagleton, Terry. 1983. *Literary Theory; an Introduction*. England: Basil Blackwell Publisher Limited.
- Endraswara, Suwardi. 2003. *Metodologi Penelitian Sastra*. Yogyakarta: CAPS.
- Gross, Steven. 2005. *Natural Kind Terms*. Department of Philosophy, University of Pennsylvania
- Gibbs. 2010. *Humidity*. Cambridge University Press.
- Harper, Douglas. 2006. *"Nature"*. Online Etymology Dictionary.
- Hermanto. 2007. *A Conflict Analysis in Emily Bronte's Wuthering Heights*. English and Literature Department. State Islamic University.
- Kennedy, William. 1966. *How to Analyze Fiction*. New York: Monarch Press.
- Koesnosoebroto, Sunaryono Basuki. 1988. *The Anatomy of Prose Fiction*. Jakarta: Departement Pendidikan dan Kebudayaan.
- Krisiyanto. 2011. *Perubahan alam*. Bandung: Universitas Pendidikan Indonesia.
- Laporte, Joseph. 2004. *Natural Kinds and Conceptual Change*. Cambridge University Press.
- McDonald, Nicola. 1982. *England and Literature*. Universities of Toronto (BA, MA) and Oxford.

- Murwanto, septo. 2013. *Cuacadaniklim*. Universitas Bandung
- Palayukan, Norpa T. 2010. *Cultural Clash in Frances Hudgson Burnett's "The Secret Garden"*. English Department. Faculty of Letters. Hasanuddin University.
- Pelling, Mark. 2003. *Natural disaster in a world*. British Library Cataloguing in Publication Data
- Prasodjo, Bernard. 2010. *Perubahan alam*. Prana Indonesia.
- Qalbiyullah, Al. 2009. *A Conflict Analysis in Jane Austen's "Sense and Sensibility"*. English and literature department. Adab and Humanities Faculty Alauddin State Islamic University.
- Rahmawati, Ita. 2011. *Citra tokoh utama pria generasi ketiga di jerman dalam hurriyet love express dan winter sonne karya imran ayat*. Science of Culture Faculty. Adab and Humanities Faculty Alauddin state Islamic University.
- Redclift R. Michael. 2010. *The transition out of carbon dependence*: London UK, Edwar Elgar.
- Rosmini. 2012. *Psychoanalysis in the novel Beastly by Alex Flinn in Sigmund Freud's Perspective*. English and Literature Department. State Islamic Univesity of Alauddin.
- Sudibyakto, M. S. 2013. *Dampak dari Perubahan Alam*. Universitas Gadjah Mada.
- Suriasumantri, Jujun. 2003. *Filsafat Ilmu (Sebuah Pengantar Populer)*. Jakarta: Pustaka Sinar Harapan.
- Stanley, J. 1997. *Names and rigid designation*. In Hale, B and Wright, C. (eds.) *A Companion to the philosophy of language*. Oxford: Blackwell.
- Sudjiman, Panuti. 1984. *Sastra Indonesia*. Jakarta: Fakultas Sastra, Universitas Indonesia.
- Thompson W. Karen. 2012. *The Age of Miracles*. Retrieved from <http://www.bookrags.com/studyguide-the-age-of-miracles/>. (Accessed on July 19th, 2014).
- Tjasyono, Bayong. 2004. *Klimatologi Umum*. Bandung: ITB Press.
- Wellek, Rene. Austin Warren. 1989. *Teori Kesusastraan*. Jakarta: PT Gramedia.

CURRICULUM VITAE



Irnawati was born in Takalar, Province of South Sulawesi, on June 2nd 1991 as the first daughter of Muhammad Tahir and Salmawati. She has one brother that called Nur Ichsan Tahir and two sister that called Irmawati and Irayanti. She lives in Takalar.

She started her elementary school at SDN Malewang Unggulan in 1997 and graduated in 2003. In the same year, she continued her study at SMPN 1 Takalar and graduated in 2006. Then she continued her study at SMAN 1 Polut and graduated in 2009.

In 2010, she registered as student of State Islamic University of Alauddin in English and Literature Department. During her study, she had ever been a board of association of Adab and Humanities Faculty Student in the period 2010-2011. She is also one of the members of Eliot Letter Organization in the period 2013-2014.

In January 2013, she joined tour in Tanah Toraja with members to fulfill the subject of English for Tourism in the sixth semester.

Quotations	Kinds of the change of nature					Effects of the change of nature				
	AT	AP	WD	H	ND	E	HT	T	FT	PM
<p>Datum 1</p> <p>‘Hot days and traffic jams, leaking pipes and long lines, even cigarette smoke’, if it wafted too close, could be really and truly God-awful. (C. II/P.8/D.1)</p>										
<p>Datum 2</p> <p>It was October, but it felt like July: the air was summer air, the sky a summer sky, still light past seven o’clock. (C. III/P.25/D.2)</p>										
<p>Datum 3</p> <p>This much is certainly true: after the slowing, every action required a little more force than it used to. The physics had changed. Take, for example, the slightly increased drag of a hand on a knife or a finger on a trigger. (C.V/P.43/D.3)</p>										
<p>Datum 4</p> <p>We were living under a new gravity, too subtle for our minds to register, But our bodies were already subject to its sway. In the weeks that followed, as the days continued to expand, I would find it harder and harder to kick a soccer ball across a field. (C.IV/P.36/D.4)</p>										

Quotations	Kinds of the change of nature					Effects of the change of nature				
	AT	AP	WD	H	ND	E	HT	T	FT	PM
<p>Datum 5</p> <p>It's the man on the speeding train who experiences time more slowly and not the other way around. (C.VII/P.76/D.5)</p>										
<p>Datum 6</p> <p>Some blamed the slight alteration in gravity, perhaps it was interfering with balance and thus hampering flight and navigation. (C.VIII/P.80/D.6)</p>										
<p>Datum 7</p> <p>The first outbreaks of gravity sickness were already popping up around the globe. Hundreds of people were experiencing symptoms of dizziness, faintness, and fatigue. (C.V/P.50/D.7)</p>										
<p>Datum 8</p> <p>We called it gravity sickness at first, the slowing syndrome later and there would come a time eventually when you need only mention <i>the syndrome</i> and everyone understood what you meant. The symptoms were wide-ranging but related: dizziness, nausea, insomnia, fatigue, and sometimes, as was the case with my mother, fainting. (C.XVIII/P.155/D.8)</p>										

Quotations	Kinds of the change of nature					Effects of the change of nature				
	AT	AP	WD	H	ND	E	HT	T	FT	PM
<p>Datum 9</p> <p>The wind reversed in the night and turned hard, blowing in from the desert instead of up from the sea. It howled and shrieked. (C.III/P.30/D.9)</p>										
<p>Datum 10</p> <p>Outside, the eucalyptus trees struggled and heaved, and the glittering stars showed that the sky was clear of clouds-this was an empty, storm less wind. (C.III/P.29/D.10)</p>										
<p>Datum 11</p> <p>The air turned cold during twenty hours of night, like the water at the bottom of a lake. All over California, grapes froze on the vine, orange groves withered in the dark, the flesh of avocados turned black from the frosts. (C.XIV/P.123/D.11)</p>										
<p>Datum 12</p> <p>We're going to see earthquakes and tsunamis, we might see mass plant and animal die-outs, the oceans may begin to shift toward the poles. (C. III/P.12/D.12)</p>										

Quotations	Kinds of the change of nature					Effects of the change of nature				
	AT	AP	WD	H	ND	E	HT	T	FT	PM
Datum 13 We were Californians and thus accustomed to the motions of the earth. (C.III/P.10/D.13)										
Datum 14 We understood that the ground could shift and shudder. (C.III/P.10/D.14) hampering flight and navigation. (C.VIII/P.80/D.6)										
Datum 15 We accepted that fissures might appear in our sidewalks. (C.III/P.10/D.15)										
Datum 16 Swimming pools sometimes sloshed like bowls of water. (C.III/P.10/D.16)										
Datum 17 We were well practiced at crawling beneath tabletops, and we knew to beware of flying glass. (C.III/P.12/D.17)										

Quotations	Kinds of the change of nature					Effect of the change of nature				
	AT	AP	WD	H	ND	E	HT	T	FT	PM
<p>Datum 18</p> <p>At the start of every school year, we each packed a large zip lock bag full of non-perishables in case the big one stranded as at school. We Californians were no more prepared for this particular calamity than those who had built their homes on more stable ground (C.III/P.12/D.18)</p>										
<p>Datum 19</p> <p>Those were days of extremes. The sun blazed longer each time it came around, baking our street until it was too hot to cross barefoot. Earthworms sizzled on patios. Daisies wilted in their beds. (C.XIV/P.123/D.24)</p>										
<p>Datum 20</p> <p>But if the rotation continues to slow and I'd say we can expect radical changes in the weather. We're going to see earthquakes and tsunami. (C. III/P.12/D.20)</p>										
<p>Datum 21</p> <p>I knew that animals often sensed danger where humans did not, and that in the minutes or hours before a tsunami or a wildfire strikes. (C.III/P.17/D.21)</p>										

Quotations	Kinds of the change of nature					Effect of the change of nature				
	AT	AP	WD	H	ND	E	HT	T	FT	PM
<p>Datum 22</p> <p>The symptoms were wide-ranging but related: dizziness, nausea, insomnia, malaria, dengue, fatigue, and sometimes, as was the case with my mother, fainting. (C.XVIII/P.155/D.22)</p>										
<p>Datum 23</p> <p>The first outbreaks of gravity sickness were already popping up around the globe. Hundreds of people were experiencing symptoms of dizziness, faintness, and fatigue. (C.V/P.50/D.23)</p>										
<p>Datum 24</p> <p>A woman might collapse in a mall, in some small children, the effects included the excessive bleeding of gums. (C.XVIII/P.155/D.24)</p>										
<p>Datum 25</p> <p>Some say that the slowing affected us in a thousand other unacknowledged ways, from the life expectancy of light bulbs to the rate at which ice melted and water boiled and human cells multiplied and human cells died. (C.VII/P.75/D.25)</p>										

Quotations	Kinds of the change of nature					Effect of the change of nature				
	AT	AP	WD	H	ND	E	HT	T	FT	PM
<p>Datum 26</p> <p>Certain people had been sounding alarms, since the subtlest thinning of the ozone layer, the glaciers were melting and the rain forests were burning. (C.XII/P.112.D.26)</p>										
<p>Datum 27</p> <p>Glaciers were melting even faster than before, certain long dormant volcanoes had begun to bubble and stem. (C.XVI/P.131/D.27)</p>										